# UNIVERSITY OF RUHUNA - FACULTY OF MEDICINE ALLIED HEALTH SCIENCES DEGREE PROGRAMME 

## Year 1 Term $1-7^{\text {th }}$ Batch - BS MLS Degree Program - $10^{\text {th }}$ June, 2014

## Continuous Assessment Test - BASIC STATISTICS MLS 1105

INDEX NO:
TIME: $9.00 \mathrm{am}-10.00 \mathrm{am}$

Answer all questions (one hour)
1.1 List 4 uses of medical statistics in Medical Laboratory Sciences. ( 8 marks)

1
2.
3.
4.
1.2 Give three examples for each of the following scales of measurements. ( 6 marks)

Nominal 1
2.
3.

Interval
2
3.
1.3 The sample mean of the HDL level of a sample of 100 patients with hypertension was 40 $\mathrm{mg} / \mathrm{dL}$ and the standard deviation was $5 \mathrm{mg} / \mathrm{dL}$.
1.3.1 Calculate the $95 \%$ confidence interval of the population mean. (15 marks)
1.3.2 How would you interpret the above results? ( 6 marks)

1.4 Serum creatinine was measured in 10 people and the results are given below.
$1.5,2.3,0.8,0.9,1.2,1.1,0.7,0.6,1.4,3.5$
1.4.1 What is the median value? ( 5 marks)
1.4.2 What is the range of the data set? (5 marks)
1.4.3 What is the best method to illustrate the distribution of the above data set? (5 marks)
2. Write short notes of the followings
2.1 Percentiles (10 marks)
2.2. Descriptive Statistics (10 marks)
2.3. Normal distribution (10 Marks)

2.4. Z distribution ( 10 marks)
2.5 Bar Charts ( 10 marks)

